

REMARKS

This application has been reviewed in light of the Final Office Action mailed on July 28, 2004. Claims 1-10 are pending in the application with Claims 1 and 10 being in independent form. By the present amendment, Claims 1 and 10 have been amended and Claim 9 has been canceled. No new matter or issues are believed to be introduced by the amendments.

The disclosure was objected to due to missing headings for each section. The specification has been amended to include headings. Accordingly, withdrawal of the objection is respectfully requested.

Claim 9 was objected to under 37 CFR Sec. 1.75(a). Claim 9 has been canceled. Accordingly, withdrawal of the objection with respect to Claim 9 is respectfully requested.

Claims 1-7 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,617,461 A issued to Schreiner on April 1, 1997 ("Schreiner").

In the Office Action, the Examiner correctly states that Applicants' previously presented Claims 1 and 10 are open-ended claim construction. "Therefore, Schreiner which discloses a correction method that takes as input a defect image (i.e., a defect table) and the original image, anticipates the claimed correction method, which has a sole input of a defect table. It is inconsequential that Schreiner also discloses that the original image is also an input to the correction method due to the fact that the applicant uses open-ended claim construction. Regarding the argument that Schreiner fails to disclose the newly added limitations, the examiner disagrees as detailed in the rejection below."

In accordance with the Examiner's statements, Applicants have amended independent Claims 1 and 10 to provide close-ended claim construction. As such, newly amended Claims 1 and 10 are believed to better define Applicants' invention and to overcome the rejection.

Claim 1 now recites "An X-ray examination apparatus which includes an X-ray source (11), an X-ray detector (13) including sensor elements for converting X-ray in electrical charges and a processing unit (2) for the correction of image data and a defect detection unit (3) for the detection of image defects that can be detected on the basis of image parameters that can be extracted from image data arising during clinical examinations and is suitable to adapt, in dependence on the detected image defects, the processing parameters (18-21) used in the processing unit (2), characterized in that for the detection of image defects caused by defective sensor elements the defect detection unit (3) includes a filter unit (37) for filtering the image data, a unit (35) for averaging the filtered image data, a comparison unit (36) for comparing the filtered and averaged image data with a threshold value in order to form a defect table identifying defective pixels in the image data, and a processing unit (2) for correcting the defective pixels identified in the defect table by taking as a sole input the defect table and by means of a correction table (20) to obtain corrected pixel values and applying the corrected pixel values to the image data from the X-ray detector (13)." (Emphasis added) Claim 10 recites similar recitations as the recitations underlined above for Claim 1.

Schreiner does not disclose or suggest at least the newly added limitations to Claims 1 and 10. Schreiner is directed to a method for identifying defective image points in X-ray image data by converting at least one calibration image into a filter image by highpass filtering. The filter image is subjected to defect determination, so that a defect image is obtained. The defect image is then used for the correction of an original image. See abstract, FIG. 2, and column 3, line 46 to column 4, line 67.

In contrast to Applicant's claimed invention, Schreiner discloses that the correction method 15 takes as inputs the defect image 14 and the original image 16. Applicant's correction

method does not take as inputs a defect image and the original image; Applicant's correction method takes as the sole input a defect table identifying defective pixels in the image data, and corrects the defective pixels by means of a correction table.

Accordingly, Schreiner does not disclose or suggest "a comparison unit (36) for comparing the filtered and averaged image data with a threshold value in order to form a defect table identifying defective pixels in the image data, and a processing unit (2) for correcting the defective pixels identified in the defect table by taking as a sole input the defect table and by means of a correction table (20) to obtain corrected pixel values and applying the corrected pixel values to the image data from the X-ray detector (13)," as recited by Applicant's Claim 1.


Further, Schreiner does not disclose or suggest "A computer-readable medium for storing a computer program for the correction of image data comprising the steps of forming a defect table identifying defective pixels, correcting the defective pixels identified in the defect table by means of a correction table (20) to obtain corrected pixel values, taking as a sole input the defect table and and applying the corrected pixel values to the image data," as recited by Applicant's Claim 10.

Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claims 1 and 10 are respectfully requested. Claims 2-8 depend from Claim 1, and therefore include the limitations of Claim 1. Accordingly, for the same reasons given for Claim 1, Claims 2-8 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claims 1-8 and 10 are respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-8 and 10, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call John Vodopia, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-333-9627.

Respectfully submitted,



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